

# Angela Zhu

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## EDUCATION

### Cornell University, College of Arts and Sciences

*Expected May 2027*

Bachelor of Arts in Computer Science, Minor in Game Design

3.7 GPA

**Coursework:** Data Structures & Functional Programming\*, Object-Oriented Programming & Data Structures, Discrete Structures, Statistics & Probability\*, Introduction to Computer Game Development, Linear Algebra (\* = Fall 2024)

## TECHNICAL SKILLS

- **Programming Languages:** Java, C#, Python, HTML/CSS, OCaml
- **Tools:** React, Git/GitHub, JSON, Fusion, Figma, Unity, LibGDX, Blender, Tiled, Adobe Photoshop

## EXPERIENCE

### Software Developer, Combat Robotics @ Cornell Project Team

*October 2023 - present*

- Redesigned team website using Figma, React, and CSS to improve code organization with reusable UI components, optimize development workflow with Vite dev servers, and enhance visual appeal for hundreds of users
- Deployed monthly website updates using HTML/CSS to promote the team, recruitment, and major events, and published the changes via FileZilla
- Collaborated with 3 members to program a claw machine in Python on a Raspberry Pi, integrating joystick, motor, and claw mechanisms

### Private Tutor (Java)

*June - July 2023*

- Delivered personalized Java programming instruction to 2 middle school students, emphasizing foundational concepts to spark interest in computer programming
- Created 5+ tailored lesson plans/exercises, improving individual student comprehension of programming topics

## PROJECTS

### McDiver Optimization Project | Programmer

Object-Oriented Programming and Data Structures, Cornell University

*December 2023*

- Partnered to optimize a Java-based computer simulation using Dijkstra's and A\* algorithms, reducing pathfinding time by 50% and increasing final collection score by 100%

### Lunar Looter Video Game | Project Lead

*May - August 2024*

Independent Project

- Spearheaded the development of a 2D stealth game with 12 levels using Unity and C# in a 3-member team
- Implemented 4-day sprint system with regular check-ins, improving productivity by 80%
- Designed and implemented AI enemy algorithms, UI/UX, level design, and ray casting

### Seas the Throne Video Game | Programmer and Designer

*January - May 2024*

Introduction to Computer Game Development, Cornell University

- Collaborated with 7 members to conceptualize and develop an open-world bullet hell game in Java and LibGDX
- Developed UI, menus, screens, animations, and controllers while debugging to ensure seamless functionality
- Built a bullet pattern simulator to visually represent coded bullet patterns for all boss AI algorithms, increasing efficiency of new bullet pattern creation by 50%
- Conducted 5 user testing sessions for feedback, resulting in tangible UX improvements and refined AI algorithms

## SKILLS AND INTERESTS

Language: Fluent in Chinese, Advanced in Spanish

Interests: Orchestra (All Eastern), Digital Art, Girl Scouts, Cross Country